August 25, 2016

Mr. James B. Harrington, P.E.
Director, Remedial Bureau A
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7015

Re: Bethpage Water District
Naval Weapons Industrial Reserve Plant, Bethpage, New York
CSIA Sampling Program
MPWD 16-50

Dear Mr. Harrington:

Together with the Massapequa Water District, we have reviewed the CSIA sampling evaluation report prepared by HDR dated April 12, 2016, which included the sample results and report prepared by Pace Analytical dated April 6, 2016. We have also reviewed the USEPA comments provided to the District on July 15, 2016.

On behalf of the District, we greatly appreciate the NYSDEC's progressive response to performing this first-time sampling program at the primary request of the District. In addition, the decision by your office to engage the USEPA in the evaluation process was extremely helpful, as they are probably the most experienced of all involved in this type of data assessment/application and would have an independent perspective. So we defer to the conclusions reached by the USEPA.

Although there have been some very positive and proactive steps taken by the NYSDEC in recent months, both calling for remediation of the most concentrated areas of the plume and developing a plan for hydraulic containment of the plume, it is still important to the program to put the results of the CSIA into context. The District first sought the CSIA testing as uncertainty was being raised by the Navy that the TCE detected in further downgradient wells may have been from a source other than the NWIRP. Following some performed due diligence, the District made the request for CSIA testing as an approach to connect the contamination found in the further downgradient monitoring wells to a source.

As the CSIA sampling program was accelerated by the NYSDEC, limited monitoring wells were identified for sampling. In general, the TCE connection made in MWs GM-73D2, RE-122D1 and TT-101D2 indicate the same source of TCE. However, moving further away from the source area (as is the case for BPOW3-4), biodegradation is a significant factor in determining connection to a source of discharged TCE or PCE degradation, causing the results in the more downgradient wells inconclusive for TCE source.

With regard to 1,4-dioxane, we appreciate the NYSDEC's inclusion of the UCMR3 contaminant in the sampling program, although we knew reaching conclusions based on the known concentrations would



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be challenging with CSIA. The connection of GM-73D2 and RE-122D1 with the same isotopic signature demonstrate the source of the 1,4-dioxane is the NWIRP groundwater plume. The results for BCPMW-4-1 and BPOW-3-2 indicating the same signature and source are interesting. The BCPMW-4-1 location is at the Bethpage Community Park and the BPOW-3-2 location is about 15,000 feet south running through the NG/NWIRP property. To be separated by such a distance and not downgradient, yet sharing the same signature is provoking.

Moving forward, as the CSIA testing did provide some information regarding the connectivity of contamination from one location to another, perhaps a more comprehensive program can provide further information and allow for further conclusion. If the NYSDEC plans to pursue additional sampling, the District would be glad to assist in the planning.

Very truly yours,

H2M architects + engineers

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President/CEO

cc: Board of Commissioners

Supt. Stan Carey Michael Ingham, Esq.

Basil Seggos, Acting NYSDEC Commissioner Carrie Gallagher, NYSDEC Regional Director

Robert Schick, NYSDEC Division of Environmental Remediation Director

Doug Garbarini, EPA Branch Chief